

Abstract

The present invention provides a method of supporting a multi-port virtual local area network (VLAN) with a multi-protocol Label switch (MPLS), comprising steps of: establishing a label switching path (LSP) by the label distribution protocol (LDP),
5 and obtaining information binding a forwarding equivalence class (FEC) and a label or information binding an ingress label and an egress label, and an address of a LDP peer entity at an opposite end, which is a next-hop IP address; the MPLS table item managing module creating a forwarding-relation table, and adding a forwarding-relation table item based upon the obtained information; obtaining an
10 egress port corresponding to the forwarding-relation table item based upon the next-hop IP address; and accomplishing the MPLS via the egress port. With the present invention, it is possible to support the multi-port VLAN in a three-layer switch with the function of the MPLS and implement the MPLS in the VLAN.